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#### **Research Article**



# **Burnout and Turnover Intentions of Emergency Department Staff**

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#### Abstract

**Aim:** In this study, it was aimed to determine the level of burnout and turnover intentions of emergency service staff and to examine the relationship between these two variables.

**Material and Methods:** This cross-sectional study was conducted in four different training and research hospitals in Ankara. The study was conducted with a total of 414 people, including 130 physicians, 215 nurses and 69 health techs/technicians who agreed to participate. The participation rate was 80%. Questionnaire method was used in the study. The questionnaire included "Sociodemographic Characteristics Form", "Maslach Burnout Inventory (MBI)" and "Turnover Intention Scale (TIS)". The analysis of the research data was performed with SPSS 23.0 statistical program.

**Results:** The age range of the participants was 18-55 years and the mean age was 32.7±6.1 years. 65% of the participants were female, 52% were nurses, and 55.1% were married. The mean scale scores were (61.6±11.9) for MBI and (2.9±1.7) for TIS. There was a positive, moderate, statistically significant relationship between MBI and TIS (r=0.623; p<0.01). It was found that emergency department staff had high levels of burnout and moderate levels of turnover intentions. Women had higher levels of emotional exhaustion than men, and physicians had higher turnover intentions than nurses and health techs/technicians.

**Conclusion:** It was observed that as burnout increased, turnover intention also increased. It is considered that health policy makers and administrators should make structural and functional reforms to reduce burnout and turnover intention in emergency department staff.

Keywords: Burnout, turnover intention, emergency department

# INTRODUCTION

Burnout, which is a new dimension of stress in healthcare workers, has emerged in many countries due to the decrease in the level of welfare and the restriction of health care expenditures. Healthcare workers are experiencing hopelessness due to work intensity, low wages, increase in the number of patients and unfavorable working conditions. Therefore, empowering healthcare workers and increasing their working power is a fundamental problem in many parts of the world, especially in developing countries (1). Burnout is defined as employees' distancing from the meaning and purpose of the profession, no longer being genuinely interested in the patients, experiencing excessive stress and psychologically withdrawing themselves from the profession (2). Burnout in healthcare professionals is quite common and is an important problem in terms of its consequences (3). Burnout in healthcare professionals who provide patient-oriented services under difficult conditions causes a decrease in their job success and emotional fatigue. Therefore, the concept of burnout and effective factors are becoming increasingly important for healthcare professionals (4).

Burnout negatively affects the quality and efficiency of the service provided. The quality of life of people experiencing burnout decreases, marriage and family life are negatively affected, inability to fulfill their duties occurs, insomnia and physical fatigue occur, drug, narcotic and excessive alcohol use increases (5). Burnout has negative consequences not only on individuals but also on health institutions in the form of decreased performance, increased absenteeism and turnover (6).

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Turnover intention is a person's willingness to leave the current institution and position (7). An increase in turnover intention is not a desirable situation for the health institution. Because the most valuable assets of organizations are qualified and educated healthcare professionals. Considering that the institutions make various investments for the development and experience of the personnel and that the employees will suffer serious losses by leaving the job, preventing this is among the primary responsibilities of the institution (8). After the COVID-19 pandemic, it was found that approximately 500 thousand healthcare workers quit their jobs in the United States in 2021 and excessive workload was found to be effective on this (9). Studies in Taiwan and Türkiye have also found that burnout due to job stress, workload and job insecurity increases the turnover intention of healthcare staff (10,11).

Emergency departments are easily accessible health units that provide 24-hour and free service to all urgent patients. In Türkiye, emergency departments are the most common unit to which patients apply (12). The increasing number of patients and workload, staff shortage, shift work, patient violence, stress caused by serving serious cases (cardiopulmonary arrest, trauma, bleeding, etc.) and patients presenting with very different complaints have a greater impact on emergency healthcare workers compared to other branches (13). This situation causes burnout and turnover in emergency health workers (14).

In this study, it was aimed to determine the level of burnout and turnover intentions of emergency department staff and to examine the relationship between these two variables.

# **MATERIAL AND METHOD**

### Study population

This cross-sectional study was conducted in four different training and research hospitals in Ankara between May 16-25, 2023. Healthcare personnel working in the emergency department constituted the universe of the study. There are 523 personnel in total, including 169 physicians, 276 nurses, and 78 health techs/ technicians, and it was tried to reach the entire universe by not making a sampling calculation. The study was conducted with a total of 414 people, including 130 physicians, 215 nurses and 69 health techs/technicians who agreed to participate in the study. The rate of participation in the study was 80%. The study was conducted with those who voluntarily participated.

### Data collection method

Questionnaire method was used in the study. The data were collected either by face-to-face or electronically via e-mail/WhatsApp (WhatsApp Inc. Menlo Park, CA) depending on the availability of the participants. The questionnaire consists of three parts. The first part included "Sociodemographic Characteristics Form", the second part included "Maslach Burnout Inventory (MBI)", and the third part included "Turnover Intention Scale (TIS)".

### Sociodemographic characteristics form

This section includes 6 questions prepared by the researchers: age, gender, marital status, status, income and duration of employment.

#### Maslach Burnout Inventory (MBI)

The MBI was developed by Maslach and Jackson in 1981 to measure the level of burnout of individuals. The MBI consists of 22 items and 3 sub-dimensions (emotional exhaustion, depersonalization and decreased sense of personal accomplishment). The Turkish adaptation study of the scale was conducted by Ergin in 1992. In the original study, Cronbach's alpha value of the scale was 0.89 for emotional exhaustion, 0.77 for depersonalization and 0.74 for decreased sense of personal accomplishment. Emotional exhaustion and depersonalization subdimensions consist of negative statements, whereas decreased sense of personal accomplishment subdimension consists of positive statements. During the analysis, the responses in the decreased sense of personal accomplishment sub-dimension were reverse coded and analyzed. In the 5-point Likert-type scale, 1 point is scored for Strongly Disagree and 5 points are scored for Strongly Agree. A high score on the scale indicates a high level of burnout (15,16).

### **Turnover Intention Scale (TIS)**

The TIS was developed by Rosin and Korabik in 1991 to determine the turnover intentions of employees. TIS consists of 4 items and one dimension. The Turkish adaptation study of the scale was conducted by Tanriover in 2005. The Cronbach's alpha value of the scale was 0.82 in the original study and 0.93 in the Turkish adaptation study. In the 5-point Likert-type scale, 1 point is obtained for Strongly Disagree and 5 points are obtained for Strongly Agree. Scores between 1 and 5 can be obtained from the scale. A high score on the scale indicates a high level of turnover intention (17,18).

#### Statistical analysis

The analysis of the study data was performed with SPSS 23.0 statistical program. Normality of the data was evaluated by Kolmogorov-Smirnov test. Due to the normal distribution of the data, Independent T test was used to compare two independent groups, One Way ANOVA and Post Hoc Tukey tests were used to compare three or more groups, and Pearson Correlation analysis was used to determine the relationships between variables. A value of p<0.05 was accepted as statistically significant.

#### **Ethical Issues**

Ethics committee permission was obtained from Lokman Hekim University Scientific Research Ethics Committee (Code No: 2023067). The necessary permissions to use the scales were obtained via e-mail from the responsible authors who developed the scales and conducted the Turkish adaptation studies. The study was conducted in accordance with publication and research ethical rules.

# RESULTS

The sociodemographic characteristics of the participants in our study are presented in Table 1. The age range of the participants was 18-55 years and the mean age was  $32.7\pm6.1$  years.

Table 1. Sociodemographic characteristics of the participants						
Sociodemographic characteristics		n	%			
Age	≤27	121	29.2			
	28-40	177	42.7			
	≥41	116	28.1			
Gender	Male	145	35.0			
	Female	269	65.0			
Marital status	Married	228	55.1			
	Single	186	44.9			
Monthly income	Income less than expenditure	266	64.2			
	Income equal to expenditure	103	24.9			
	Income more than expenditure	45	10.9			
Profession	Physician	130	31.4			
	Nurse	215	52.0			
	Health technician/technician	69	16.6			
Duration of employment	≤5 years	73	17.7			
	6-10 years	182	43.9			
	≥11 years	159	38.4			

#### Table 2. Descriptive findings for MBI and TIS

Descriptive information about the responses of the participants to the scales is presented in Table 2. The mean scores were ( $61.6\pm11.9$ ) for MBI and ( $2.9\pm1.7$ ) for TIS. In the reliability analysis of the scales, Cronbach Alpha value was found to be 0.89 for MBI and 0.81 for TIS.

MBI and its sub-dimensions were compared according to sociodemographic characteristics and it was found that females  $(29.7\pm7.5)$  had a significantly higher average value than males  $(25.9\pm8.3)$  in the emotional exhaustion sub-dimension (p=0.03). There was no statistically significant difference between the groups in the MBI scale and its sub-dimensions according to other sociodemographic characteristics (p>0.05).

When TIS scores were analyzed according to sociodemographic characteristics, it was found that physicians  $(3.2\pm0.9)$  had a statistically significantly higher mean score than nurses  $(2.9\pm1.1)$  and health techs/ technicians  $(2.8\pm1.6)$  (p<0.001). No statistically significant difference was found between the groups in TIS scores according to other sociodemographic characteristics (p>0.05).

The correlation analysis results between MBI and TIS are shown in Table 3.

In our study, positive, high-level, statistically significant relationships were found between MBI total score and emotional exhaustion (r=0.752; p<0.01), depersonalization (r=0.836; p<0.01), and decreased sense of personal accomplishment (r=0.704; p<0.01) sub-dimensions. Positive, high-level, statistically significant relationships were also found between the MBI scale sub-dimensions (p<0.01). There was a positive, moderate, statistically significant relationship between MBI and TIS (r=0.623; p<0.01).

Table 2. Descriptive findings for wibi and ho						
Scale	Number of items	Min	Max	Mean	SD	Cronbach Alpha
MBI	22	22	101	61.6	11.9	0.89
Emotional exhaustion	9	9	45	27.7	8.6	0.91
Depersonalization	8	5	21	16.6	6.5	0.83
Decreased sense of personal accomplishment	8	8	37	21.8	7.3	0.87
TIS	4	1	5	2.9	1.7	0.81

Min: minimum, Max: maximum, SD: standart deviation, MBI: Maslach Burnout Inventory, TIS: Turnover Intention Scale

Table 3. Correlation analysis between MBI and TIS								
	1	2	3	4	5			
1.MBI	1							
2. Emotional exhaustion	0.752*	1						
3.Depersonalization	0.836*	0.756*	1					
4.Decreased sense of personal accomplishment	0.704*	0.712*	0.720*	1				
5. TIS	0.623*	0.706*	0.742*	0.680*	1			

MBI: Maslach Burnout Inventory, TIS: Turnover Intention Scale, \* significant at p<0.01 level

# DISCUSSION

In this study, it was aimed to determine the level of burnout and turnover intentions of healthcare workers in emergency departments and to examine the relationship between these two variables.

It is seen that the level of burnout of the healthcare staff in emergency departments is high in our study. While some previous studies found that the burnout of healthcare workers was at a moderate level (4,19), some studies conducted with emergency department staff found that it was at a high level (20-22). It is considered that burnout syndrome is more common in healthcare professionals who are the first responders to the patient, especially in emergency departments, and that these units are more at risk (23). In a study conducted with emergency physicians, it was stated that the level of burnout after the COVID-19 pandemic was higher than before the pandemic, and that workload and working conditions had an impact on the level of burnout (24). Factors such as long working hours, inability to spare time for sports and hobbies, fear of malpractice, financial difficulties and therefore taking additional shifts, patient load, witnessing death, violence, mobbing, lack of infrastructure and personnel, frequent change of duty location are thought to cause high levels of burnout in emergency department staff (20,25,26).

In our study, it was observed that emotional burnout levels of females were higher than males. While some studies in the literature found no difference in the level of burnout according to gender (4,27); some studies found similar results to our research (22,28,29). Emotional exhaustion is the first and most important dimension of burnout. The reluctance and fatigue felt at the beginning of the day are the characteristics of individuals in this dimension. It may occur due to intense life activity (29). It is thought that emotional burnout in females is higher than males due to the fact that women are emotional and have more responsibilities in home and childcare in addition to business life. No significant difference was found in the level of burnout of the participants according to other sociodemographic characteristics. In this respect, it is similar to some previous studies (4,21).

In some studies conducted with healthcare workers, turnover intention was found to be low (30,31), while in some studies it was found to be at a moderate level (32,33). In our study, it was observed that the participants' turnover intention was at a moderate level. It was found that there were significant differences in the studies conducted before and after the COVID-19 pandemic and that emergency healthcare workers, like all healthcare workers, experienced higher work stress, depression, anxiety, insomnia, stayed away from their families and missed, had increased workload due to the increasing number of patients and new care protocols developed, experienced burnout, decreased quality of life, experienced more health problems, and all these factors led to an increase in turnover intentions. It has also been reported that these effects are long term and persist after the pandemic (34,35).

In our study, the turnover intention of physicians was higher than that of nurses and health techs/technicians. In Türkive, there has been a significant increase in the number of physicians resigning from their jobs and going abroad in recent years. Between 2020 and 2022, a total of 13,557 physicians, including 6,592 specialists and 6,965 general practitioners, resigned from their positions in health institutions and organizations affiliated to the Ministry of Health. In the last 10 years, the number of physicians going abroad, such as to European countries and the USA, has increased 40 times. In 2012, the number of physicians going abroad was 59, while in 2022 it was approximately 2,500. There is a remarkable increase in the number of physicians going abroad from critical branches such as emergency medicine, neurosurgery, anesthesiology and reanimation, general surgery, pediatrics, gynecology and obstetrics (36). It is seen that many factors such as insufficient wages, difficult working conditions, patient burden, exposure to violence by patients and their relatives are effective in physicians' resignation and going abroad (37). In addition, although these difficult working conditions are also valid for nurses and health technicians/technicians, it is considered that physicians' higher opportunity to work in the private sector or abroad is effective in their quitting and intentions. No significant difference was found in the turnover intentions of the participants according to other sociodemographic characteristics. In this respect, it is similar to some previous studies (30,38).

In our study, a moderately significant positive correlation was found between burnout and turnover intention. In other words, the increase in burnout in healthcare workers increases turnover intention. Similar results were found in previous studies (39,40).

The limitation of the study is that the study was carried out only in the city of Ankara and with health workers in the emergency departments of four hospitals.

# **CONCLUSION**

In conclusion, it was found that the level of burnout of emergency health workers was high and their turnover intention was at a moderate level. Females had higher levels of emotional exhaustion than males, and physicians had higher turnover intentions than nurses and health technicians/technicians. It was found that there was a positive and moderately significant correlation between burnout and turnover intention, and as burnout increased, turnover intention also increased. It is considered that health policy makers and administrators should make structural and functional reforms to reduce burnout and turnover intention in emergency health workers. It is suggested that future studies should be planned to compare public and private hospitals, emergency departments and other departments, and between big and small cities.

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**Conflict of Interest:** The authors declare that they have no competing interest.

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